

**EAST Search History****EAST Search History (Prior Art)**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	712	(Ishikawa near2 Tadashi).in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/12/29 16:13
L2	17	(Nakashima near2 Kiyotaka).in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/12/29 16:13
L3	28	(Nose near2 Tetsuro).in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/12/29 16:13
L4	20	(Tominaga near2 Tomonori).in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/12/29 16:13
L5	41	(Higo near2 Yakichi).in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/12/29 16:13
L6	36	(Takashima near2 Kazuki).in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/12/29 16:13
L7	789	L1 or L2 or L3 or L4 or L5 or L6	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/12/29 16:13

L8	52	L7 and (nanocrystal\$4 OR nano-crystal\$4 or nano crystall\$4 or nano\$2crystal\$4 or (sub micron or sub-micron or sub\$2micron) near3 (grain or crystal\$8) or ultrasonic or ultrasound or ultrason\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/12/29 16:14
L9	53	L7 and (nanocrystal\$4 OR nano-crystal\$4 or nano crystall\$4 or nano\$2crystal\$4 or (sub micron or sub-micron or sub\$2micron) or ultrasonic or ultrasound or ultrason\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/12/29 16:14
L10	855238	(Nippon).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/12/29 16:14
L11	6413	L10 and (nanocrystal\$4 OR nano-crystal\$4 or nano crystall\$4 or nano\$2crystal\$4 or (sub micron or sub-micron or sub\$2micron) or ultrasonic or ultrasound or ultrason\$4) not L9	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/12/29 16:15
L12	105	L10 and (nanocrystal\$4 OR nano-crystal\$4 or nano crystall\$4 or nano\$2crystal\$4 or (sub micron or sub-micron or sub\$2micron) or ultrasonic or ultrasound or ultrason\$4) same (peen\$4 or impact\$4 or hammer\$4) not L9	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/12/29 16:15
L13	76	(ultra\$2sonic or ultra\$2sound or ultra\$2son\$4) near5 (peen\$4 or impact\$4 or hammer\$4) and (pin or hammer or needle) same (direction or axis or angle) same (plurality or first or second or multiple)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/12/29 16:19
L14	269	(ultra\$2sonic or ultra\$2sound or ultra\$2son\$4) near5 (peen\$4 or impact\$4 or hammer\$4) and (pin or hammer or needle or vibrat\$5) same (direction or axis or angle) same (plurality or first or second or multiple)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/12/29 16:19
L15	72	(ultra\$2sonic or ultra\$2sound or ultra\$2son\$4) near5 (peen\$4 or impact\$4 or hammer\$4) and (pin or hammer or needle or vibrat\$5) same (direction or axis or angle) near10 (plurality or first or second or multiple)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/12/29 16:19

L16	13	(ultra\$2sonic or ultra\$2sound or ultra\$2son\$4) near5 (peen\$4 or impact\$4 or hammer\$4) and (pin or hammer or needle or indenter or indenter) same (direction or axis or angle) near10 (plurality or first or second or multiple)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/12/29 16:19
L17	17	(ultra\$2sonic or ultra\$2sound or ultra\$2son\$4) near5 (peen\$4 or impact\$4 or hammer\$4) and (pin or hammer or needle or indenter or indenter) same (direction or axis or angle or orient or oriented or orientation) near10 (plurality or first or second or multiple)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/12/29 16:20
L18	34	(ultra\$2sonic or ultra\$2sound or ultra\$2son\$4) near5 (peen\$4 or impact\$4 or hammer\$4) and (pin or hammer or needle or indenter or indenter) same (direction or axis or angle or orient or oriented or orientation or align\$5) near10 (plurality or first or second or multiple)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/12/29 16:20
L19	766	(ultra\$2sonic or ultra\$2sound or ultra\$2son\$4) near5 (peen\$4 or impact\$4 or hammer\$4) and (pin or hammer or needle or indenter or indenter)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/12/29 16:22
L20	87	(Statnikov or Prokopenko).in.	US-PGPUB; USPAT	ADJ	ON	2009/12/29 16:56
L21	3	L20 and "2009".py.	US-PGPUB; USPAT	ADJ	ON	2009/12/29 16:56
L22	75	29/81.13,81.14,81.15.ccls.	US-PGPUB; USPAT	ADJ	ON	2009/12/29 17:01
L23	404	72/53.ccls.	US-PGPUB; USPAT	ADJ	ON	2009/12/29 17:01
L24	513	148/558,561,565.ccls.	US-PGPUB; USPAT	ADJ	ON	2009/12/29 17:01
L25	460	173/133.ccls.	US-PGPUB; USPAT	ADJ	ON	2009/12/29 17:01
L26	1440	L22 or L23 or L24 or L25	US-PGPUB; USPAT	ADJ	ON	2009/12/29 17:01
L27	65	L26 and "2009".py.	US-PGPUB; USPAT	ADJ	ON	2009/12/29 17:03
L28	2224	C21D7/04 or C21D007/04 or C21D7/06 or C21D007/06	FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/12/29 17:09

L29	608	C21D1/04 or C21D001/04	FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/12/29 17:09
L30	600	C21D10/00 or C21D010/00	FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/12/29 17:09
L31	27	M26-C02\$2	FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/12/29 17:09
L32	1393	M24-D06\$2	FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/12/29 17:09
L33	2115	M29-D\$2	FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/12/29 17:09
L34	6140	L28 or L29 or L30 or L31 or L32 or L33	FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/12/29 17:10
L35	86	L34 and (ultra\$2sonic or ultra \$2sound or ultra\$2son\$4) near5 (peen\$4 or impact\$4 or hammer \$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/12/29 17:10
S1	697	(Ishikawa near2 Tadashi).in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 15:56
S2	17	(Nakashima near2 Kiyotaka).in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 15:57
S3	28	(Nose near2 Tetsuro).in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 15:57
S4	20	(Tominaga near2 Tomonori).in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 15:57

S5	40	(Higo near2 Yakichi).in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 15:57
S6	36	(Takashima near2 Kazuki).in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 15:57
S7	838649	(Nippon).as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 16:15
S8	102	(S2 or S3 or S4 or S5 or S6)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 16:16
S9	2	"20060130942"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 16:16
S10	21	(US-20060137777-\$ or US-20020014100-\$ or US-20050242066-\$ or US-20070006943-\$ or US-20060065333-\$ or US-20040038626-\$ or US-20040250920-\$ or US-20080041502-\$.did. or (US-6467321-\$ or US-6338765-\$ or US-6926780-\$ or US-7276824-\$.did. or (WO-2004040023-\$ or US-6171415-\$ or JP-2004122152-\$ or US-20050242066-\$ or US-20060016858-\$ or US-20070040476-\$ or US-20070068605-\$ or CN-1887507-\$ or JP-2008038222-\$.did.	US-PGPUB; USPAT; DERWENT	ADJ	ON	2009/04/09 16:17
S11	100	S8 not (S9 or S10)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 16:18

S12	839018	(S1 or S7) not (S8 or S9 or S10)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 16:45
S13	5835	S12 and (nanocrystal\$4 OR nano-crystal\$4 or nano crystal\$4 or nano\$2crystal\$4 or (sub micron or sub-micron or sub \$2micron) near3 (grain or crystal\$8) or ultrasonic or ultrasound or ultrason\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 16:47
S14	39	S12 and (nanocrystal\$4 OR nano-crystal\$4 or nano crystal\$4 or nano\$2crystal\$4 or (sub micron or sub-micron or sub \$2micron) near3 (grain or crystal\$8))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 16:47
S15	634	S12 and (ultrason\$8 or ultrasound) same (treat\$4 or peen\$4 or impact\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 16:48
S16	75	S15 and (nano\$10 or sub \$2micron or sub micron or amorphous or non\$2crystalline or non-crystalline or metallic near3 glass)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 16:48
S17	113	S14 or S16	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 16:49
S18	99	(Statnikov).in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 16:51
S19	1017	(Prokopenko).in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 16:52
S20	243	(nanocrystal\$8 or nano-crystal\$8 or nano crystal\$8 or nano \$2crystal\$8) and (ultrasound or ultrasonic) same (impact\$4 or treat\$4 or peen\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 16:53

S21	15	S19 and (ultrasound or ultrasonic) same (impact\$4 or treat\$4 or peen\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 16:54
S22	3700	(sub\$2micron or sub micron or nano\$10) near10 (grain or crystal or crystall\$8) and (ultrasonic\$5 or ultrasound)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 16:55
S23	966	(sub\$2micron or sub micron or nano\$10) near10 (grain or crystal or crystall\$8) and (ultrasonic\$5 or ultrasound) same (peen\$4 or impact\$4 or treat\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 16:56
S24	554	S23 and (amorphous or noncrystalline or non-crystalline or non crystalline or bulk metallic glass or metallic near3 glass\$2)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 16:57
S25	438	S24 and (surface or layer) same (treat\$4 or impact\$4 or peen \$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 16:57
S26	48	(US-20060137777-\$ or US-20050242066-\$ or US-20040250920-\$ or US-20080041502-\$ or US-20040038626-\$ or US-20070006943-\$ or US-20020014100-\$ or US-20060065333-\$ or US-20050230010-\$ or US-20030003763-\$ or US-20070237943-\$ or US-20070068605-\$ or US-20060130942-\$).did. or (US-6338765-\$ or US-7276824-\$ or US-6926780-\$ or US-6467321-\$ or US-5280724-\$ or US-7399371-\$ or US-6475599-\$ or US-7422790-\$ or US-7078015-\$ or US-5994164-\$).did. or (EP-403807-\$ or WO-2004040023-\$ or WO-2004040022-\$ or WO-2004046399-\$ or WO-2004046398-\$ or WO-2004046397-\$ or WO-2004046396-\$ or WO-2004046395-\$ or WO-2004046394-\$ or EP-1559796-\$ or EP-1577401-\$).did. or (JP-	US-PGPUB; USPAT; EPO; JPO; DERWENT	ADJ	ON	2009/04/09 17:01

		2002220647-\$ or JP- 2003201549-\$ or JP- 2004169105-\$ or JP- 2004169078-\$).did. or (US- 20060016858-\$ or US- 20070040476-\$ or JP- 2004122152-\$ or US-6171415-\$ or WO-2004040023-\$ or US- 20050242066-\$ or US- 20070068605-\$ or JP- 2008038222-\$ or CN-1887507-\$ or JP-2003201549-\$).did.				
S27	334	(S18 or S20 or S21) not S26	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 17:01
S28	2	"20060137777"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 17:55
S29	2	"20070134059"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 17:56
S30	1	WO "0210462"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 17:59
S31	2	JP "2002220647"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 18:00
S32	2	JP "2003201549"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 18:00
S33	2	JP "58116954"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 18:00



S34	10	US "6171415"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 18:00
S35	0	JP "8001514"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 18:00
S36	2	JP "2003113418"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 18:00
S37	2	JP "09234585"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 18:15
S38	2	JP "01079320"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 18:16
S39	27	S28 or S29 or S30 or S31 or S32 or S33 or S34 or S35 or S36 or S37 or S38	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 18:16
S40	2	JP "08001514"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 18:17
S41	1111	(rikogaku near2 Shinkokai)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 19:03
S42	2	S41 and (nano\$2crystal\$8)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 19:03

S43	787	148/558,561,565.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 19:04
S44	64	(Daniel near2 Branagan).in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 19:06
S45	27	S44 and (nano\$2crystal\$8 or nano crystal\$8)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 19:06
S46	41	S43 and (nanocrystal\$8 or nano-crystal\$8 or nano crystal \$8 or nano\$2crystal\$8)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 19:13
S47	35	S43 and (ultrasound or ultrasonic) same (impact\$4 or treat\$4 or peen\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 19:14
S48	70	S46 or S47	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 19:14
S49	110	(US-20060137777-\$ or US- 20050242066-\$ or US- 20040250920-\$ or US- 20080041502-\$ or US- 20040038626-\$ or US- 20070006943-\$ or US- 20020014100-\$ or US- 20060065333-\$ or US- 20050230010-\$ or US- 20030003763-\$ or US- 20070237943-\$ or US- 20070068605-\$ or US- 20060130942-\$ or US- 20070040476-\$ or US- 20060237104-\$ or US- 20060016858-\$ or US- 20050145306-\$ or US- 20050092397-\$ or US- 20040244882-\$ or US- 20040173290-\$ or US- 20070244595-\$).did. or (US-	US-PGPUB; USPAT; EPO; JPO; DERWENT	ADJ	ON	2009/04/09 19:14

6338765-\$ or US-7276824-\$ or  
US-6926780-\$ or US-6467321-\$  
or US-5280724-\$ or US-  
7399371-\$ or US-6475599-\$ or  
US-7422790-\$ or US-7078015-\$  
or US-5994164-\$ or US-  
7431779-\$ or US-7344609-\$ or  
US-7147726-\$ or US-7032725-\$  
or US-6932876-\$ or US-  
6843957-\$ or US-6289736-\$ or  
US-6171415-\$ or US-6025034-\$  
or US-5984996-\$ or US-  
6033624-\$ or US-5874684-\$ or  
US-7301123-\$ or US-7285447-\$  
or US-7449074-\$).did. or (EP-  
403807-\$ or WO-2004040023-\$  
or WO-2004040022-\$ or WO-  
2004046399-\$ or WO-  
2004046398-\$ or WO-  
2004046397-\$ or WO-  
2004046396-\$ or WO-  
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2004046394-\$ or EP-1559796-\$  
or EP-1577401-\$ or WO-  
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2007005080-\$ or WO-  
2006057836-\$ or EP-1552028-\$  
or WO-2005060014-\$ or WO-  
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or WO-2004013359-\$ or FR-  
2662180-\$).did. or (JP-  
2002220647-\$ or JP-  
2003201549-\$ or JP-  
2004169105-\$ or JP-  
2004169078-\$ or JP-  
2004169104-\$ or JP-  
2004169100-\$ or JP-  
2003113418-\$ or JP-09234585-  
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2004122152-\$ or US-6171415-\$  
or WO-2004040023-\$ or US-  
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or JP-2003201549-\$ or WO-  
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or US-20050145306-\$ or WO-  
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2005042206-\$ or US-  
20040173290-\$ or WO-  
2004046394-\$ or WO-  
2004013359-\$ or US-  
20020043313-\$ or FR-2812286-  
\$ or US-6338765-\$ or US-

		20020014100-\$ or WO-9117273-\$ or JP-08001514-\$). did. or (WO-2004033144-\$ or JP-2003113418-\$ or JP-2002220647-\$ or FR-2812285-\$ or JP-09234585-\$ or JP-01079320-\$ or JP-58116954-\$). did.				
S50	53	S48 not S49	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 19:14
S51	14	US "6338765"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 19:18
S52	2	US "20020043313"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 19:19
S53	2	US "20020124402"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 19:19
S54	2	US "20020014100"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 19:19
S55	31	UIT.as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 19:24
S56	24	M26-C02\$2	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 19:26
S57	455	(nano crystal\$8 or nano\$2crystal\$8) same steel	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 19:27

S58	338	(nano crystal\$8 or nano\$2crystal\$8) same steel and (heat\$4 or heat adj2 treat\$4 or anneal\$4 or devitrif\$8 or de\$2vitrif\$8)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 19:28
S59	118	(US-20060137777-\$ or US-20050242066-\$ or US-20040250920-\$ or US-20080041502-\$ or US-20040038626-\$ or US-20070006943-\$ or US-20020014100-\$ or US-20060065333-\$ or US-20050230010-\$ or US-20030003763-\$ or US-20070237943-\$ or US-20070068605-\$ or US-20060130942-\$ or US-20070040476-\$ or US-20060237104-\$ or US-20060016858-\$ or US-20050145306-\$ or US-20050092397-\$ or US-20040244882-\$ or US-20040173290-\$ or US-20070244595-\$ or US-20020043313-\$ or US-20070256764-\$ or US-20020189726-\$).did. or (US-6338765-\$ or US-7276824-\$ or US-6926780-\$ or US-6467321-\$ or US-5280724-\$ or US-7399371-\$ or US-6475599-\$ or US-7422790-\$ or US-7078015-\$ or US-5994164-\$ or US-7431779-\$ or US-7344609-\$ or US-7147726-\$ or US-7032725-\$ or US-6932876-\$ or US-6843957-\$ or US-6289736-\$ or US-6171415-\$ or US-6025034-\$ or US-5984996-\$ or US-6033624-\$ or US-5874684-\$ or US-7301123-\$ or US-7285447-\$ or US-7449074-\$ or US-7175722-\$).did. or (US-7439470-\$ or US-6458225-\$).did. or (EP-403807-\$ or WO-2004040023-\$ or WO-2004040022-\$ or WO-2004046399-\$ or WO-2004046398-\$ or WO-2004046397-\$ or WO-2004046396-\$ or WO-2004046395-\$ or WO-2004046394-\$ or EP-1559796-\$ or EP-1577401-\$ or WO-2007024495-\$ or WO-2007015688-\$ or WO-	US-PGPUB; USPAT; EPO; JPO; DERWENT	ADJ	ON	2009/04/09 19:28

		2007005080-\$ or WO- 2006057836-\$ or EP-1552028-\$ or WO-2005060014-\$ or WO- 2005042206-\$ or EP-1447455-\$ or WO-2004013359-\$ or FR- 2662180-\$).did. or (JP- 2002220647-\$ or JP- 2003201549-\$ or JP- 2004169105-\$ or JP- 2004169078-\$ or JP- 2004169104-\$ or JP- 2004169100-\$ or JP- 2003113418-\$ or JP-09234585- \$ or JP-01079320-\$ or JP- 58116954-\$).did. or (US- 20060016858-\$ or US- 20070040476-\$ or JP- 2004122152-\$ or US-6171415-\$ or WO-2004040023-\$ or US- 20050242066-\$ or US- 20070068605-\$ or JP- 2008038222-\$ or CN-1887507-\$ or JP-2003201549-\$ or WO- 2008150250-\$ or US- 20070244595-\$ or WO- 2007015688-\$ or CN-1702188-\$ or US-20050145306-\$ or WO- 2005060014-\$ or WO- 2005042206-\$ or US- 20040173290-\$ or WO- 2004046394-\$ or WO- 2004013359-\$ or US- 20020043313-\$ or FR-2812286- \$ or US-6338765-\$ or US- 20020014100-\$ or WO- 9117273-\$ or JP-08001514-\$). did. or (WO-2004033144-\$ or JP-2003113418-\$ or JP- 2002220647-\$ or FR-2812285-\$ or JP-09234585-\$ or JP- 01079320-\$ or JP-58116954-\$ or US-6458225-\$ or US- 20020189726-\$).did.				
S60	332	S58 not S59	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 19:28
S61	1	US "5634988"	DERWENT	ADJ	ON	2009/04/09 20:29
S62	1	US "6290905"	DERWENT	ADJ	ON	2009/04/09 20:29
S63	1	US "20010038001"	DERWENT	ADJ	ON	2009/04/09 20:29
S64	1	US "20040244882"	DERWENT	ADJ	ON	2009/04/09 20:29

S65	1	US "20050230010"	DERWENT	ADJ	ON	2009/04/09 20:29
S66	1	US "20050252888"	DERWENT	ADJ	ON	2009/04/09 20:29
S67	1	US "20070000968"	DERWENT	ADJ	ON	2009/04/09 20:29
S68	7	US "3274033"	USPAT; USOCR	ADJ	ON	2009/04/09 20:29
S69	1	JP "08118012"	DERWENT	ADJ	ON	2009/04/09 20:29
S70	1	JP "2000158127"	DERWENT	ADJ	ON	2009/04/09 20:29
S71	1	JP "2003290972"	DERWENT	ADJ	ON	2009/04/09 20:29
S72	10	S61 or S62 or S63 or S64 or S65 or S66 or S67 or S69 or S70 or S71	DERWENT	ADJ	ON	2009/04/09 20:30
S73	14	steel same de\$2vitri\$8 same (nano\$2crystal\$8) and (anneal \$4 or heat\$4) same (time or duration or hours or minutes or temperature or celsius or fahrenheit)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 20:35
S74	238	C21D007/04	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 20:35
S75	702	C21D007/06	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 20:35
S76	240	C21D001/04	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 20:36
S77	193	C21D010/00	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 20:36
S78	1315	M24-D06\$2	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 20:36

S79	4872	M24-D01B\$2	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 20:36
S80	2067	M29-D\$2	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 20:36
S81	9296	(S74 or S75 or S76 or S77 or S78 or S79 or S80)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 20:36
S82	13	S81 and ((nano\$2crystal\$8 or nano crystal\$8) or (sub \$2micron or ultra\$2fine or super \$2fine) near5 (crystal\$6 or grain)) and (ultrasound or ultrasonic\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 20:37
S83	33	S81 and ((nano\$2crystal\$8 or nano crystal\$8) or (sub \$2micron or ultra\$2fine or super \$2fine) near5 (crystal\$6 or grain)) and (heat\$4 or anneal\$4 or de\$2vitrif\$8)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 20:38
S84	24	S83 not S82	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 20:39
S85	33	C22C045/02 and (de\$2vitrif\$8 or anneal\$4 or heat\$4) and (nano\$8 or nano\$2crystal\$8)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 20:40
S86	32309	(ultrasound or ultrasonic\$4) near10 (impact\$4 or treat\$4 or peen\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 20:41
S87	67	(ultrasound or ultrasonic\$4) near10 (impact\$4 or treat\$4 or peen\$4) and (equiaxed or equiaxial)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 20:42



S88	56	(ultrasound or ultrasonic\$4) near10 (impact\$4 or treat\$4 or peen\$4) and (equiaxed or equiaxial) same (grain or crystal \$4 or micro\$2structure)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 20:42
S89	70	(nano\$2crystal\$8 or (sub \$2micron or sub micron) near3 grain) same steel and (equiaxed or equiaxial) same (grain or crystal\$4 or micro\$2structure)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 20:47
S90	190	(nano\$2crystal\$8) and (equiaxed or equiaxial) same (grain or crystal\$4 or micro \$2structure)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 20:48
S91	15	de\$2vitrif\$8 and (equiaxed or equiaxial) near4 (grain or crystal \$4 or micro\$2structure)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 20:49
S92	1140	(anneal\$4 or heat\$4) and steel and (equiaxed or equiaxial) near4 (grain or crystal\$4 or micro\$2structure)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 20:50
S93	139	S92 and (ultrasound or ultrasonic\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/09 20:50
S94	163	(Jian near2 Lu).in. or (ke near2 Lu).in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/10 17:16
S95	3	FR "2689431"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/10 17:22
S96	15	"1391135"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/10 17:23

S97	2	JP "08001514"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/10 17:27
S98	2	JP "2003113418"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/10 17:27
S99	2	JP "09234585"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/10 17:27
S100	2	JP "57026119"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/10 17:30
S101	1	SU "1821342"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/10 17:49
S102	1	SU "1243931"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/10 17:49
S103	1	SU "799853"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/10 17:49
S104	1	SU "1258676"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/10 17:49
S105	0	SU "3311882"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/10 17:50

S106	8003	(ultrasound OR ultrasonic\$8) near5 (impact\$4 or hammer\$4 or peen\$4 or treat\$4) and (inert near3 gas or argon or nitrogen or protective near3 (gas or atmosphere))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/11 19:34
S107	8	(ultrasound OR ultrasonic\$8) near5 (impact\$4 or hammer\$4 or peen\$4 or treat\$4) and (inert near3 gas or argon or nitrogen or protective near3 (gas or atmosphere)) and (statnikov or prokopenko).in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/04/11 19:35

**EAST Search History (Interference)**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L36	404	72/53.ccls.	US-PGPUB; USPAT	ADJ	ON	2009/12/29 17:21
L37	513	148/558,561,565.ccls.	US-PGPUB; USPAT	ADJ	ON	2009/12/29 17:21
L38	460	173/133.ccls.	US-PGPUB; USPAT	ADJ	ON	2009/12/29 17:21
L39	75	29/81.13,81.14,81.15.ccls.	US-PGPUB; USPAT	ADJ	ON	2009/12/29 17:21
L40	1440	L36 or L37 or L38 or L39	US-PGPUB; USPAT	ADJ	ON	2009/12/29 17:22
L42	65	L40 and "2009".py.	US-PGPUB; USPAT	ADJ	ON	2009/12/29 17:22
L43	50	(ultra\$2sonic or ultra\$2sound or ultra\$2son\$4) near5 (peen\$4 or impact\$4 or hammer\$4)	UPAD	ADJ	ON	2009/12/29 17:22

**12/ 29/ 2009 5:27:51 PM****C:\ Documents and Settings\ mshevin\ My Documents\ EAST\ Workspaces\ 10-535346 - RCE.wsp**